

# Piedras Blancas Light Station Restoration & Management Priorities 2009—2013



#### **PURPOSE**

This document, *Piedras Blancas Light Station: Restoration & Management Priorities 2009-2013*, articulates how the Bureau of Land Management (BLM) will implement the Piedras Blancas Activity Plan in establishing the Piedras Blancas Light Station as a premier visitor attraction on the central California coast. It provides an overview of existing and future funding opportunities through 2019 with a more focused analysis for 2009-2013.

An activity plan for managing the Light Station was completed in 2007 and this document tiers from that plan by outlining both the one-time and annual costs for completing projects as well as scheduled completion dates. The projects, costs, and schedules are grouped under five key themes: native plant restoration, partnerships, visitor services, infrastructure upgrades and historic restoration. Following this discussion is a financial overview for all the themes and a funding analysis demonstrating how current investments will be used to make Piedras Blancas more self-sufficient.

Finally, this document also serves as a business plan to implement the proposed Piedras Blancas Historic Light Station Outstanding Natural Area Act. This legislation recognizes the distinguishing prehistoric, historic and natural characteristics of the light station and provides protections to safeguard these features. When enacted, this Outstanding Natural Area (ONA) will be included within the BLM's National Landscape Conservation System (NLCS) and it will serve as a strategic gateway to the California Coastal National Monument.

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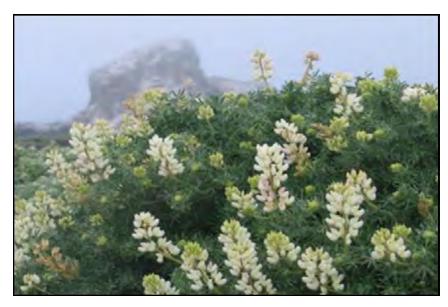
#### MANAGER'S FOREWORD

March 4, 2008

On October 12, 2001, Piedras Blancas Light Station was officially transferred to the Bureau of Land Management from the United States Coast Guard. A formal transition ceremony was held on May 25, 2002. Encompassing a mere 19 acres, this special place harbors an abundance of unique features. Rich in both cultural and natural resources, the area is a showcase for interpretive opportunities in California history and coastal ecosystems.

Field surveys and open meetings revealed strong public support for restoring Piedras Blancas Light Station to its period of significant maritime history (1875-1939) as well as providing structured visitation and continued research opportunities. Working collaboratively with the public and local communities on planning issues, an environmental assessment for the Piedras Blancas Light Station was completed in 2007. The BLM will continue to ensure community involvement in management decisions at Piedras Blancas and will establish partnerships with key stakeholders in achieving desired goals and objectives. The BLM's management of Piedras Blancas will complement area management by adjoining agencies and local communities.





Bush lupine and the Outer Islet at Piedras Blancas

In looking towards the future, the Piedras Blancas Light Station is expected to be nationally designed as an ONA and be included as an NLCS unit. National designation and the appeal of heritage tourism will increase visibility, awareness and interest creating the need for enhanced resource stewardship. The BLM's ability to meet this challenge will require an increase in staff, volunteers and partnership support. Of particular importance is the success of the Piedras Blancas Light Station Association (PBLSA) and its ability to generate funding and support for the restoration and long term operation and maintenance of the Piedras Blancas Light Station.

Tim Smith
Bakersfield Field Manager
Bureau of Land Management

#### **OVERVIEW OF PIEDRAS BLANCAS**

Piedras Blancas Light Station is located on California's central coast north of San Simeon. San Simeon is a popular destination attracting a half million visitors a year. Much of that tourism is focused on the Hearst Castle State Historic Monument, six miles south of Piedras Blancas. In addition, many visitors enjoy sightseeing along scenic State Highway 1 with seasonal attractions such as the arrival of the northern elephant seals and the California gray whale migration.

Piedras Blancas (Spanish for white rocks) is named for the rock outcrops located near shore. In the early 1870's, the location was chosen for the construction of a lighthouse. The ocean waters that surround Piedras Blancas are part of the Monterey Bay National Marine Sanctuary. The islets and rocks located offshore are part of the California Coastal National Monument. All land bordering Piedras Blancas is administered by the California Department of Parks and Recreation.

The BLM's objective is to preserve and protect the cultural and natural resources at Piedras Blancas while providing opportunities for public visitation and scientific research that is compatible with management objectives. Current research includes tide pool popu-

Piedras Blancas

Paso Robles

Cambria

Cayucos

Cayucos

Morro Ray

Los Osos

San Miguel

Paso Robles

Paso Robles

Paso Robles

Los Osos

San Luis Obispo

Piedras Blancas is proposed to be designated as an Outstanding Natural Area within the National Landscape Conservation System as supported by Representative Lois

lation dynamics (University of California at Santa Cruz), Pacific jet-stream and California gray whale population studies (National Oceanic and Atmospheric Administration) and earthquake, sea otter and northern elephant seal population studies (US Geological Survey).

A phased implementation plan has been developed to restore the light station to a period in history when it played a significant role in maritime navigation. Emphasis on restoration will focus on existing historical structures. The Piedras Blancas Light Station Historic District includes several buildings of significance. The lighthouse, fog signal building and fuel oil house are currently listed on the National Register of Historic Places.

#### **IMPLEMENTATION STAGES**

The following is a description of the key themes that overtime, will ensure the full restoration and management of the area Within each theme is a description of the costs to complete the projects, existing available funding, and potential funding opportunities needed to make the Piedras Blancas Outstanding Natural Area fully operational.

The focus of this document is primarily on the "Building Phase" implementation stage. The overall long term goal is to complete all phases so the vision for the Piedras Blancas Light Station will become reality.

### Piedras Blancas Light Station Vision

"Manage and restore the Piedras Blancas Light Station to a period in its history when the site played a significant role in the protection of central California maritime activities. In addition, preserve and protect the natural, historical, and cultural resources of the site while providing opportunities for compatible scientific, cultural, social, and interpretive activities for the benefit of present and future generations".

#### **Building Phase (2009-2013)**

- •Conclude native plant restoration
- Develop partnerships
  - Volunteers
  - •Community groups
  - Association (PBLSA) & friends groups
  - •Educational outreach & research
- Develop visitor services
- •Correct infrastructure deficiencies
- Begin historic restoration

#### Initiation Phase (2001-2008)

- •Correct immediate safety hazards
- •Establish partnerships
- •Establish volunteer program
- •Begin native plant restoration
- •Develop rudimentary visitor services
- •Establish friends group or Piedras Blancas

Light Station Association (PBLSA)

•Complete activity plan

#### **Completion Phase (2014-2018)**

#### **Achieve**

- •Fully functional PBLSA
- •Financial sustainability
- •Fully operational visitor services & outreach program
- •Fully functional partnerships & volunteer program
- •Complete historic restoration

#### **Operation and Maintenance Phase (2019)**

• Financial sustainability

## **Native Plant Restoration (2009-2013)**

Thanks to the efforts of dedicated BLM volunteers, a vegetative miracle is occurring at the Piedras Blancas Light Station. When the Bureau of Land Management assumed management of Piedras Blancas in 2001, the site was covered with iceplant (*Carpobrotus edulus and C. chilensis*) and more than 40 other non-native plant species. BLM decided to eliminate non-native vegetation and allow native plants to return. As of January 2008, more than 800 tons of iceplant have been removed from the site resulting in native plant species re-colonization and an increase in the number of animal species inhabiting the light station grounds.

Roughly two-thirds of the 19 acres encompassing the Piedras Blancas Light Station have been treated for non-native plant removal. Six acres remain to be treated. The entire site is expected to be cleared of all non-native plant species in three more years, resulting in reduced restoration costs in the future. By the end of 2008 the BLM will have spent approximately \$80,000 on native plant restoration at Piedras Blancas. An additional \$30,000 is needed to treat the entire site.

<u>Goal</u>: Remove all non-native plants and restore with native plant species. Maintain annually to prevent exotic plant species from re-establishing.

**Partners: Volunteers, California State Parks** 

Cost of Project: \$45,000 plus \$5,000 annually

**Current Funding: \$15,000 plus \$5,000 annually** 

<u>Additional Funding Opportunities</u>: \$30,000 to complete the restoration.





Area treated for restoration (2003)

Native plants flourish (2004)



One of the huge successes of the Piedras Blancas native plant restoration program involves the compact cobwebby thistle, *Cirsium occidentale* var. *Compactum*, listed as threatened in California. In 2001, one plant was found at Piedras Blancas. The thistle is one of the first native plant species to return to areas cleared of non-native plants. In 2007, more than 1,000 compact cobwebby thistles were documented at Piedras Blancas. The success of returning native plants is an interpretive theme shared with visitors who tour the Piedras Blancas Light Station.

| NATIVE PLANT RESTORATION | Unit Cost    | Total cost | Current Funding | Funding Opportunities |
|--------------------------|--------------|------------|-----------------|-----------------------|
| One-time Cost            | \$7,500/acre | \$45,000   | \$15,000        | \$30,000              |
| Annual Costs             | \$250/acre   | \$5,000/yr | \$5,000 /yr     | 0                     |

### **Partnerships** (2009-2013)

#### **Piedras Blancas Light Station Association & Friends Groups**

Friends groups will be the cornerstone to successful programs at Piedras Blancas. The BLM will continue to nurture partnerships with friends groups to provide awareness and support for the restoration and long term operation and maintenance of the Piedras Blancas Light Station.

#### **Volunteer & Community Groups**

Piedras Blancas Light Station is fortunate to be located near a supportive community. The BLM will continue to facilitate an active volunteer program by coordinating and training new recruits and encouraging stewardship. The Bureau will also encourage the participation of community groups in achieving the light station goals and objectives. BLM will also encourage and facilitate activities that foster community attachment to and support of the light station.

#### **Educational Outreach & Research**

Local private and public schools have expressed a desire to develop a student educational program in conjunction with California state standards. It is anticipated that educational programs will increase to the point where at least one day a week will be devoted to curriculum-based school programs which include classroom and light station activities. Higher learning institutions such as Questa College and California Polytechnic State University will continue to offer educational courses featuring the Piedras Blancas Light Station. The BLM will continue to facilitate on-site research.

**Goal:** Establish partnerships to leverage available funding and foster community ownership.

<u>Partners</u>: Local volunteers and community groups, local and regional schools and colleges, Piedras Blancas Light Station Association, California State Parks, National Geographic Theater, Monterey Bay National Marine Sanctuary, local, state and federal agencies (USGS, NOAA, NMFS)

**Cost of Project: \$80,000 annually** 

**Current Annual Funding: \$30,000** 

Additional Funding Opportunities: \$50,000 to fully develop and implement partnership programs.



Volunteers remove iceplant from Piedras Blancas grounds

| Annual Cost                     | Unit Cost        | Total Cost | Current Funding | Funding Opportunities |
|---------------------------------|------------------|------------|-----------------|-----------------------|
| Friends Groups Management       | \$5,000/program  | \$5,000    | \$2,000         | \$3,000               |
| Volunteer Management            | \$35,000/program | \$35,000   | \$20,000        | \$15,000              |
| Educational Outreach Management | \$40,000/program | \$40,000   | \$5,000         | \$35,000              |

### Visitor Services (2009-2013)

Substantial public interest in touring the Piedras Blancas Light Station was strongly evident at public scoping meetings. Prior to BLM's acquisition of the Piedras Blancas Light Station, tours were infrequent. The current tour program is in its infancy. Tours are offered Tuesday and Thursday mornings as well as the third Saturday of each month resulting in an annual visitation of approximately 2,000 guests. The current number of tours does not meet demand. BLM's goal is to offer daily tours for approximately 150 visitors for an annual visitation of 50,000. To protect sensitive resources and research activities, all visitation to Piedras Blancas is by scheduled tours. All guests to the light station are escorted by trained volunteer guides who provide informative interpretive programs and answer visitor inquiries.





 $\underline{Goal}$ : Increase visitation from 2,000 visitors (2008) to 50,000 visitors (2013) by:

- Providing daily interpretive tours.
- Developing informative visitor center and wayside exhibits.
- Institute quality controls and feedback system to insure visitor satisfaction

<u>Partners</u>: Local volunteers, California State Parks, National Geographic Theater, Monterey Bay National Marine Sanctuary, Piedras Blancas Light Station Association, California Coastal National Monument

<u>Cost of Projects</u>: \$70,000 plus \$125,000 annually

**Current Annual Funding: \$35,000 annually** 

Additional Funding Opportunities: \$70,000 to complete exhibits/website and \$121,000 to accommodate an anticipated 50,000 visitors.

| One-Time Cost                 | Unit Cost         | Total Cost        | Current Funding | <b>Funding Opportunities</b> |
|-------------------------------|-------------------|-------------------|-----------------|------------------------------|
| Trail/Visitor Center Exhibits | \$60,000/lump sum | \$60,000          | 0               | \$60,000                     |
| Web Site Upgrade              | \$10,000/lump sum | \$10,000          | 0               | \$10,000                     |
| Annual Cost                   | Unit Cost         | <b>Total Cost</b> | Current Funding | <b>Funding Opportunities</b> |
| Entrance Fee Management       | \$1/visitor       | \$50,000          | \$5,000         | \$45,000                     |
| Tour Management               | \$1/visitor       | \$50,000          | \$15,000        | \$35,000                     |
| Resource/Visitor Protection   | \$.50/visitor     | \$25,000          | \$15,000        | \$10,000                     |
| Interpretive Materials        | \$.75/visitor     | \$38,000          | \$7,000         | \$31,000                     |

## **Infrastructure Upgrade** (2009-2013)

The Piedras Blancas Light Station does not have an adequate infrastructure to service visitation and administrative needs. The following upgrades are required:

**Water:** Of particular concern is the water delivery system. A spring is the current water source but is unsuitable for consumption. If BLM's plan to drill a well is unsuccessful, the current system will be upgraded using costly purifying techniques.

**Fire:** The fire suppression system does not provide adequate protection to the facility and its visitors. The existing system needs to be upgraded to increase water storage and pump reliability.

**Electrical:** Electrical improvements are underway and will include a power backup system is for maritime lighthouse operations and safety. Overhead power lines need to be replaced with underground lines.

**Roads:** The existing roads need of repair and/or modification. To mitigate safety concerns at the Highway 1 turnoff, the entrance road needs relocation.

**Trails and Walkways:** Some sidewalks need to be made American Disability Act (ADA) compliant. The first phase of building an interpretive trail has been completed and is being used by visitors touring the light station. When completed this trail will be ADA compliant with viewing areas featuring interpretive wayside exhibits. The trail project is being funded by the Piedras Blancas Light Station Association.

<u>Goal</u>: Provide adequate infrastructure to accommodate visitation and administrative needs.

<u>Partners</u>: Local volunteers, California State Parks, Piedras Blancas Light Station Association

<u>Cost of Projects</u>: \$790,000 plus \$22,000 for annual maintenance

<u>Current Funding</u>: \$302,000 plus \$14,000 for annual maintenance

<u>Additional Funding Opportunities</u>: \$488,000 for upgrades and \$8,000 for annual maintenance.

| One-time Cost            | Unit Cost        | Total Cost | Current Funding        | <b>Funding Opportunities</b> |
|--------------------------|------------------|------------|------------------------|------------------------------|
| Water & Fire Suppression | \$150,000/system | \$150,000  | \$55,000               | \$95,000                     |
| Electrical               | \$275,000/system | \$275,000  | \$164,000              | \$111,000                    |
| Roads                    | \$16/SqYd        | \$282,000  | 0                      | \$282,000                    |
| Trails & Walkways        | \$11/SqFt        | \$83,00    | \$83,000               | 0                            |
| Annual Cost              | Unit Cost        | Total Cost | <b>Current Funding</b> | <b>Funding Opportunities</b> |
| Water & Fire Suppression | \$7000/system    | \$7,000    | \$7,000                | 0                            |
| Electrical               | \$2000/system    | \$2,000    | \$2,000                | 0                            |
| Roads                    | \$.30/SqYd       | \$8,000    | \$3,000                | \$5,000                      |
| Trails                   | \$1.25/SqFt      | \$5,000    | \$2,000                | \$3,000                      |



Newly constructed interpretive trail funded by the Piedras Blancas Light Station Association

### **Historic Era Restoration** (2009-2018)

#### Overview:

Restoration of the Piedras Blancas Light Station was the issue of most importance discussed at public scoping meetings. The public has tasked the BLM to restore the light station to its period of greatest historic significance (1875 to 1939). Piedras Blancas Light Station was evaluated for inclusion on the National Register of Historic Places and three of the existing structures qualified: the lighthouse (1875), fog signal building (1906) and fuel oil house (1907). Other existing structures include a tank storage house (1935), two duplex housing units (1960), mobile instrumentation station (1960), boathouse (1991) and the fuel and storage building (1876). Historic era restoration will focus on the existing historical structures. To aid in the restoration, a phased implementation plan has been developed (see pages 6 & 7). Some existing buildings will be restored, others will be removed, and significant support structures that have been removed will be replaced with replicas. Retaining the character-defining elements of the light station is paramount. Historic era restoration of the Piedras Blancas Light Station is anticipated to take 10 years to complete.

Pages 11-14 provide a detailed description of the work and budget for restoring each of the buildings over the next 10 years.

**Goal:** Restore Piedras Blancas Light Station to its period of greatest historic significance and provide preventive maintenance

<u>Partners</u>: Volunteers, Piedras Blancas Light Station Association, National Park Service

<u>Cost of project</u>: \$9,451,000 plus \$40,000 for annual maintenance.

<u>Current Annual Funding</u>: \$688,000 plus \$10,000 for annual maintenance

Additional Funding Opportunities: \$8,763,000 to restore the facilities and \$30,000 for maintenance.

| H | inigs over the next 10 years. |                                  |                                |  |  |  |  |
|---|-------------------------------|----------------------------------|--------------------------------|--|--|--|--|
|   | <b>Historic Restoration</b>   | Replica Construction             | Removal                        |  |  |  |  |
|   | Lighthouse                    | Barn                             | Mobile Instrumentation Station |  |  |  |  |
|   | Fog Signal Building           | Watch Room                       | Boathouse                      |  |  |  |  |
|   | Fuel Oil House                | Assistant Light Keeper Residence | Duplex Housing Units           |  |  |  |  |
|   | Fuel and Storage Building     | Head Light Keeper Residence      |                                |  |  |  |  |
|   | Tank House                    | Laundry                          |                                |  |  |  |  |

Storage Shed



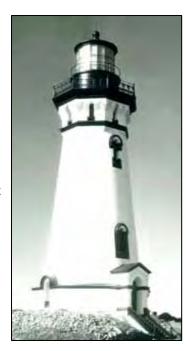
The restoration of Piedras Blancas to its era of greatest historic significant will be challenging. The majority of funding will come from revenues generated by the Piedras Blancas Light Station Association.



### **Historic Era Restoration:** *Lighthouse*



The Piedras Blancas lighthouse was constructed in 1875 and is the focal point of the historic restoration program. The photo on the right shows the tower with the fourth landing, watch room, lantern room and first order Fresnel lens before it was truncated. The photo on the left shows the tower as it exists today. The original Fresnel lens is on display in the nearby community of Cambria. The lighthouse restoration will be a phased process consisting of 1) stabilization and remediation and 2) historic replica reconstruction. Phase one includes seismic engineering studies, lead paint removal, masonry repair, window reconstruction, recasting of roof plates, cast iron repair and replacement and repainting of interior and exterior surfaces. Repairs to the lighthouse entrance include replacement of or repair to the tablature plate, door jams, stair treads, balusters, handrail, exterior doors and miscellaneous mill work. Phase two includes demolition of the concrete cap and support components, placement of an engineered anchoring system and replica construction of the fourth landing, watchroom, lantern room and lens.



| One-time Costs       | Unit Cost         | Current Funding | Funding Opportunities | Total Cost  |
|----------------------|-------------------|-----------------|-----------------------|-------------|
| Stabilization        | \$2,500,000/phase | \$300,000       | \$2,200,000           | \$2,500,000 |
| Replica construction | \$5,000,000/phase | 0               | \$5,000,000           | \$5,000,000 |
| Annual Costs         | Unit Cost         | Current Funding | Funding Opportunities | Total Cost  |
| Maintenance          | \$10,000/year     | \$5,000         | \$5,000               | \$10,000    |



Original Fresnel lens, Cambria, CA

The restored lighthouse will continue to serve as an aid to navigation and as an interpretive feature at the Piedras Blancas Light Station.

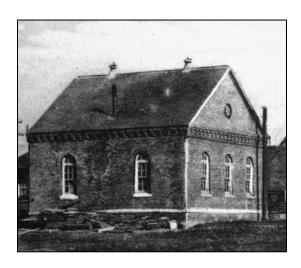


Lighthouse entrance

### Historic Era Restoration: Fog Signal Building



The photo on the right shows the fog signal building as it appeared in the early 1900's. The picture on the left is how it appears today. Restoration to the historic fog signal building includes lead paint removal, masonry repairs, floor replacement, mill work to windows, doors and trusses, roof repairs, roof covering replacement, installation of roof vents and gutters, and seismic retrofit. The building will serve as an interpretive feature housing displays and will also be used for special events.



| One-time Costs | Unit Cost         | Current Funding | Funding Opportunities | Total Cost |
|----------------|-------------------|-----------------|-----------------------|------------|
| Restoration    | \$275,000/project | \$150,000       | \$125,000             | \$275,000  |
| Annual Costs   | Unit Cost         | Current Funding | Funding Opportunities | Total Cost |
| Maintenance    | \$4,000/year      | \$2,000         | \$2,000               | \$4,000    |

### Historic Era Restoration: Fuel Oil House



The non-descript fuel oil house is actually a building of historical significance. Built in 1907 it was designed to withstand an earthquake such as the one that left San Francisco in ruins the previous year. It is one of the first buildings to incorporate steel reinforcement in a concrete structure. It was built to store kerosene used to fuel the Fresnel lens in later years. The building needs lead paint removal, exterior repairs, recast roof, and door and window replacement. The fuel oil house will be used solely as an interpretive feature of Piedras Blancas Light Station.

| One-time Costs | Unit Cost        | Current Funding | Funding Opportunities | Total Cost |
|----------------|------------------|-----------------|-----------------------|------------|
| Restoration    | \$43,000/project | \$0             | \$43,000              | \$43,000   |
| Annual Costs   | Unit Cost        | Current Funding | Funding Opportunities | Total Cost |
| Maintenance    | \$1,000/year     | <b>\$0</b>      | \$1,000               | \$1,000    |

### Historic Era Restoration: Tank House & Fuel and Storage Building



Two wood framed structures of local significance are the tank house (left) and the fuel and storage building (right). The tank house needs lead paint removal, new roof covering and minor exterior repairs. The fuel and storage building needs major repairs to the foundation, roof, support structures, windows, doors and interior and exterior walls. The rehabilitation of the fuel and storage building is being funded by the Piedras Blancas Light Station Association and the BLM.



| One-time Cost | Unit Cost         | Total Cost | Current Funding | Funding Opportunities |
|---------------|-------------------|------------|-----------------|-----------------------|
| Restoration   | \$215,000/project | \$215,000  | \$215,000       | 0                     |
| Annual Cost   | Unit Cost         | Total Cost | Current Funding | Funding Opportunities |
| Maintenance   | \$5,000/year      | \$5,000    | \$2,000         | \$3,000               |

#### Historic Era Restoration: Historical Features

In addition to building restoration, other important historical features are in need of repair or replication to fully represent the historic era of the Piedras Blancas Light Station. These features include rehabilitation of the flag display area and recreating replicas of the entrance arch, gate, water tank and wind fencing. Landscaping is appropriate in areas to revive the historical view shed.



| One-time Cost       | Unit Cost         | Total Cost | Current Funding | Funding Opportunities |
|---------------------|-------------------|------------|-----------------|-----------------------|
| Historical Features | \$75,000/lump sum | \$25,000   | 0               | \$75,000              |
| Annual Cost         | Unit Cost         | Total Cost | Current Funding | Funding Opportunities |
| Maintenance         | \$2,500/year      | \$2,000    | \$500           | \$2,000               |

### **Historic Era Restoration:** Replica Construction



Five important support buildings that have been removed will be built as replicas. The head light keeper's cottage will be replicated and used for administrative offices. The Victorian triplex (left) that housed the assistant light keeper and family will be replicated and used as a visitor center, administrative offices and storage. The barn will be replicated and used for volunteer and maintenance operations. The watch room that stood adjacent to the fog signal building will be used for interpretation and administration. The small laundry building that stood near the tank house will house the light station's main electrical panels. The storage shed previously located near the Victorian residences will serve as a public restroom.

| One-time Cost         | Unit Cost     | <b>Total Cost</b> | Current Funding | Funding Opportunities        |
|-----------------------|---------------|-------------------|-----------------|------------------------------|
| Replica Triplex       | \$200/SqFt    | \$725,000         | 0               | \$725,000                    |
| Replica Cottage       | \$200/SqFt    | \$306,000         | 0               | \$306,000                    |
| Replica Barn          | \$150/SqFt    | \$160,000         | 0               | \$160,000                    |
| Replica Watchroom     | \$150/SqFt    | \$42,000          | 0               | \$42,000                     |
| Replica Storage Shed  | \$150/SqFt    | \$62,000          | 0               | \$62,000                     |
| Replica Laundry       | \$150/SqFt    | \$23,000          | \$23,000        | 0                            |
| Annual Costs          | Unit Cost     | <b>Total Cost</b> | Current Funding | <b>Funding Opportunities</b> |
| Maintenance (6 bldgs) | \$18,000/year | \$18,000          | 0               | \$18,000                     |

### Historic Era Restoration: Building Removal



Four buildings that were constructed after the era of historic significance will be removed from Piedras Blancas. The boathouse and instrumentation building (right) will be removed and their functions relocated to the residential duplexes (left). Once the replicas of the Victorian residences are constructed, the duplexes will be removed.

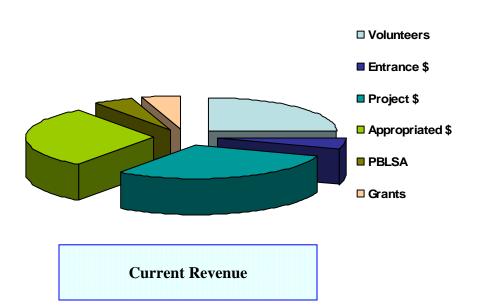


| One-time Cost            | Unit Cost   | Total Cost | Current Funding | Funding Opportunities |
|--------------------------|-------------|------------|-----------------|-----------------------|
| Demolition (4 buildings) | \$1.75/SqFt | \$25,000   | 0               | \$25,000              |

### **REVENUE PROJECTIONS**

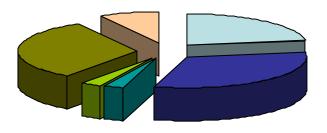
Restoring the Piedras Blancas Light Station to its era of greatest historic significance will be challenging. BLM's goal is to complete restoration of the light station by 2018. Progress will take place as funds become available.

As Piedras Blancas visitation increases, so will anticipated revenues from entry fees (see chart on right). Additionally, as the Piedras Blancas Light Station Association (PBLSA) matures, funds from memberships, grants, donations and merchandise sales will accelerate. As depicted below, BLM's long term goal is that all these fund sources will be used to finance operations and restoration thereby offsetting the need for appropriated funding.



| Potential entry fee revenues      |            |  |  |  |  |  |
|-----------------------------------|------------|--|--|--|--|--|
| 2,000 visitors<br>(\$15 / person) | \$30,000   |  |  |  |  |  |
| 5,000 visitors                    | \$75,000   |  |  |  |  |  |
| 10,000 visitors                   | \$150,000  |  |  |  |  |  |
| 25,000 visitors                   | \$375,000* |  |  |  |  |  |
| 30,000 visitors                   | \$450,000  |  |  |  |  |  |
| 40,000 visitors                   | \$600,000  |  |  |  |  |  |
| 50,000 visitors                   | \$750,000  |  |  |  |  |  |

<sup>\*</sup> The revenues from 25,000 visitors will generate enough funds to offset yearly operational costs. Additional visitation would generate funds for restoration.



**Anticipated Revenue** 

### CONCLUSION

To the public traveling scenic California State Highway 1, the view of the Piedras Blancas Light Station is an enticing sight. The focal point from that vantage is the lighthouse. And for those fortunate to enter the light station, there is the element of discovery; historic structures framed by panoramic ocean views, native vegetation and the sights and sounds of wildlife.

The public has challenged the BLM to restore the Piedras Blancas Light Station as well as facilitate visitation and on site research.

**Restoration & Management** presents how the BLM and supporting partners will fund the opportunities to accomplish these goals. Much has been accomplished at Piedras Blancas since 2001 when the BLM acquired the light station and much more will be accomplished in the future. With the help of ambitious and dedicated volunteers and support groups, Piedras Blancas Light Station will become a financially sustainable visitor attraction.

#### **Opportunities for Support**

- Visitation Management
- Entrance Fee Collection
- Volunteer Management
- Grant Coordination
- Special Event Coordination
- Education and Outreach
- Resource and Visitor Protection
- Project Management
- Maintenance







The Lighthouse Club at Grover Heights Elementary School has formed the "Pennies for Piedras" donation drive. They have contributed over \$3,000 to the restoration of Piedras Blancas.

|                               | Piedras Blancas Volunteer Program (hours donated) |       |       |       |       |       |              |
|-------------------------------|---|-------|-------|-------|-------|-------|--------------|
|                               |   | 2003  | 2004  | 2005  | 2006  | 2007  | Total Hours  |
| Category Biological Resources | 100   | 3,214 | 4,866 | 5,237 | 4,627 | 4,346 | 22,390       |
| Cultural Resources            |   |       |       | 540   | 768   | 519   | 2,536        |
| Minerals                      |   |       | 602   | 42    |       |       | 644          |
| Support Services              | 91  | 560   | 1,189 | 1,554 | 1,086 | 3,454 | 7,934        |
| 2002<br>Interpretation        | 709   |       | 727   | 700   | 532   | 1,115 | 3,232 hours  |
| TOTALS                        | 191   | 3,932 | 8,093 | 8,073 | 7,013 | 9,434 | 36,736 hours |

Volunteers have logged 36,736 hours of service at Piedras Blancas which equates to \$477,568 in labor costs.

# Financial Statement Summary: Restoration & Management Priorities 2009-2013

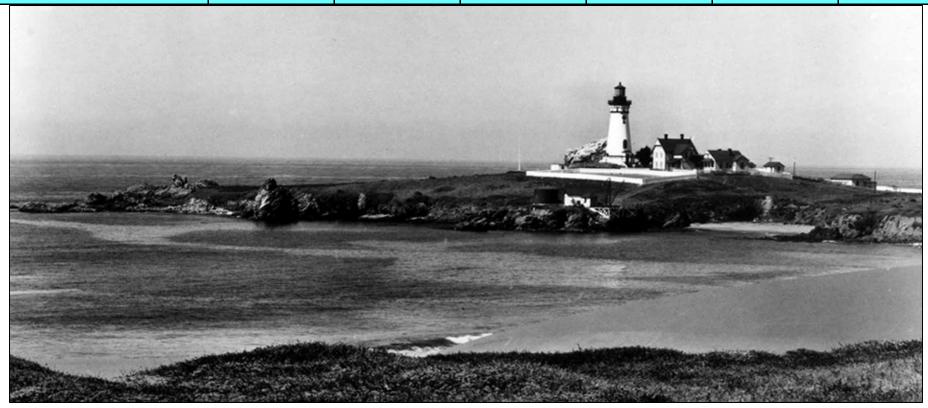
| Theme                       | Project  | Total Project Cost Current Fund |          | Funding     | Additional Funding<br>Opportunities |              |          |
|-----------------------------|--|---------------------------------|----------|-------------|-------------------------------------|--------------|----------|
|                             |  | Annual                          | One-time | Annual      | One –time                           | Annual       | One-time |
| Native Plant<br>Restoration | Non-native plant removal and native revegetation | \$5,000                         | \$45,000 | \$5,000     | \$15,000                            | \$0          | \$30,000 |
|                             | Total for Theme                                  | \$5,000                         | \$45,000 | \$5,000/yr  | \$15,000                            | \$0/yr       | \$30,000 |
| Partnerships                | Friends Groups Management                        | \$5,000                         | \$0      | \$2,000     | \$0                                 | \$3,000      | \$0      |
|                             | Volunteer Program<br>Management                  | \$35,000                        | \$0      | \$20,000    | \$0                                 | \$15,000     | \$0      |
|                             | Education and Outreach management                | \$40,000                        | \$0      | \$5,000     | \$0                                 | \$35,000     | \$0      |
|                             | Total for Theme                                  | \$90,000                        | \$0      | \$27,000/yr | \$0                                 | \$53,000/yr  | \$0      |
| Visitor Services            | Entrance Fee Management                          | \$50,000                        | \$0      | \$5,000     | \$0                                 | \$45,000     | \$0      |
|                             | Tour Management                                  | \$50,000                        | \$0      | \$15,000    | \$0                                 | \$35,000     | \$0      |
|                             | Resource and Visitor<br>Protection               | \$25,000                        | \$0      | \$15,000    | \$0                                 | \$10,000     | \$0      |
|                             | Interpretive Materials                           | \$38,000                        | \$0      | \$7,000     | \$0                                 | \$31,000     | \$0      |
|                             | Wayside and Visitor<br>Center Exhibits           | \$0                             | \$60,000 | \$0         | \$0                                 | \$0          | \$60,00  |
|                             | Website Upgrade                                  | \$0                             | \$10,000 | \$0         | \$0                                 | \$0          | \$10,000 |
|                             | Total for Theme                                  | \$163,000/yr                    | \$70,000 | \$42,000/yr | \$0                                 | \$121,000/yr | \$70,000 |

# Financial Statement Summary: Restoration & Management Priorities 2009-2013 (continued)

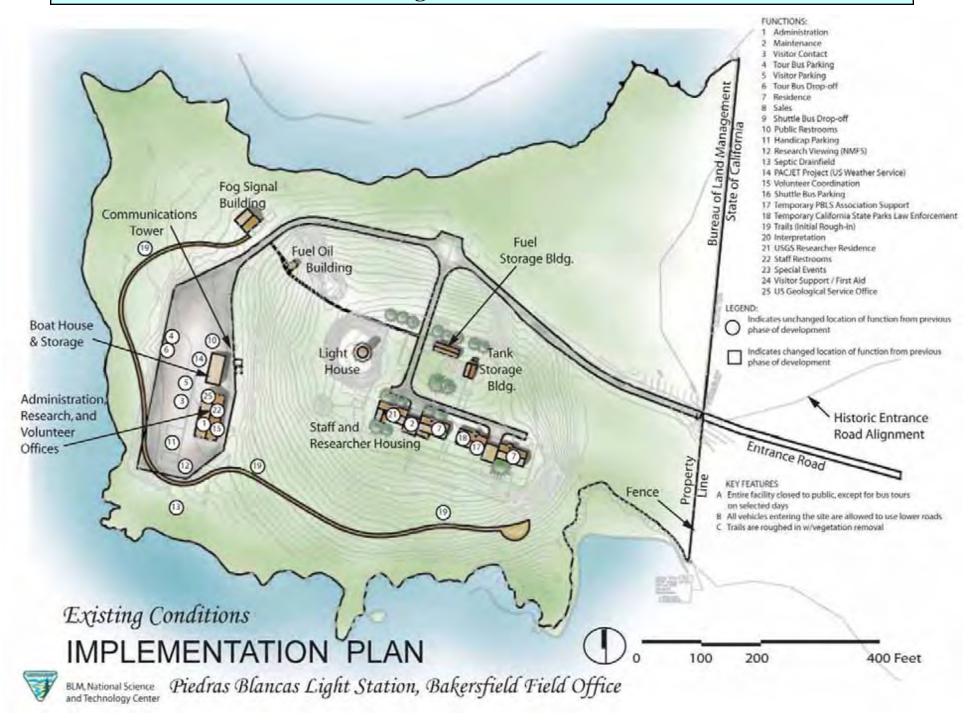
| Theme                       | Project                         | Total Project Cost |             | Current     | Funding   | Additional Funding<br>Opportunities |             |
|-----------------------------|---------------------------------|--------------------|-------------|-------------|-----------|-------------------------------------|-------------|
|                             |                                 | Annual             | One-time    | Annual      | One-time  | Annual                              | One-time    |
| Infrastructure              | Trails and Walkways             | \$5,000            | \$83,000    | \$2,000     | \$83,000  | \$3,000                             | \$0         |
|                             | Electrical                      | \$2,000            | \$275,000   | \$2,000     | \$164,000 | \$0                                 | \$111,000   |
|                             | Water and Fire Sup-<br>pression | \$7,000            | \$150,000   | \$7,000     | \$55,000  | \$0                                 | \$95,000    |
|                             | Roads                           | \$8,000            | \$282,000   | \$3,000     | \$0       | \$5,000                             | \$282,000   |
|                             | Total for Theme                 | \$22,000/yr        | \$790,000   | \$14,000/yr | \$302,000 | \$8,000/yr                          | \$488,000   |
| Historic Era<br>Restoration | Lighthouse                      | \$10,000           | \$7,500,000 | \$5,000     | \$300,000 | \$5,000                             | \$7,200,000 |
| (2009-2018)                 | Fog Signal Building             | \$4,000            | \$275,000   | \$2,000     | \$150,000 | \$2,000                             | \$125,000   |
|                             | Fuel Oil Building               | \$1,000            | \$43,000    | \$0         | \$0       | \$1,000                             | \$43,000    |
|                             | Tank House and Fuel<br>Storage  | \$5,000            | \$215,000   | \$2,000     | \$215,000 | \$3,000                             | \$0         |
|                             | Historical Features             | \$2,000            | \$75,000    | \$1,000     | \$0       | \$1,000                             | \$75,000    |
|                             | Victorian Triplex               | \$4,000            | \$725,000   | 0           | \$0       | \$4,000                             | \$725,000   |
|                             | Victorian Cottage               | \$3,000            | \$306,000   | \$0         | \$0       | \$3,000                             | \$306,000   |
|                             | Barn                            | \$3,000            | \$160,000   | \$0         | \$0       | \$3,000                             | \$160,000   |
|                             | Watchroom                       | \$2,000            | \$42,000    | \$0         | \$0       | \$2,000                             | \$42,000    |
|                             | Storage Shed                    | \$5,000            | \$62,000    | \$0         | \$0       | \$5,000                             | \$62,000    |
|                             | Laundry                         | \$1,000            | \$23,000    | \$0         | \$23,000  | \$1,000                             | \$0         |

# Financial Statement Summary: Restoration & Management Priorities 2009-2013 (continued)

| Themes  | Project              | Total Cost of Project |              | Current Funding |             | Additional Funding Opportunities |             |
|---|----------------------|-----------------------|--------------|-----------------|-------------|----------------------------------|-------------|
|   |                      | Annual                | One-time     | Annual          | One-time    | Annual                           | One-time    |
| Historic Era Restoration (continued)  | Removal of Buildings | \$0                   | \$25,000     | \$0             | \$0         | \$0                              | \$25,000    |
|   | Total for Theme      | \$40,000              | 9,451,000    | \$10,000/yr     | \$688,000   | \$30,000/yr                      | \$8,763,000 |
| TOTAL ALL THEMES (note: these totals do not include 15% needed for general administration of the individual projects. |                      | \$310,000/yr          | \$10,356,000 | \$98,000/yr     | \$1,005,000 | \$212,000/yr                     | \$9,351,000 |



## Piedras Blancas Light Station and Facilities—2008



### Piedras Blancas Light Station and Facilities—2018

